DIALOG(R)File 351:Derwent WPI (c) 2002 Thomson Derwent. All rts. reserv.

012658111

WPI Acc No: 1999-464216/ 199939

XRAM Acc No: C99-136545 XRPX Acc No: N99-347879

Active material for battery - is a mixture of a lithium compound, a nickel compound, at least one kind of transient metal compound, and an alkali earth metal compound, and an active material

Patent Assignee: HONSO FMC ENERGY SYSTEMS KK (HONS-N); TORAY IND INC (TORA

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 11195416 A 19990721 JP 97368015 A 19971227 199939 B

Priority Applications (No Type Date): JP 97368015 A 19971227 Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes

Abstract (Basic): JP 11195416 A

JP 11195416 A 5 H01M-004/58

A raw material compound is a mixture of a lithium compound, a nickel compound, at least one kind of transient metal compound, and an alkali earth metal compound, and an alkali earth metal compound, and an active material for a battery represented by a chemical formula is produced. The chemical formula is Lilx-a AxNily-bByO2, wherein A is an alkali earth metal element, B consists of at least one kind of a transient metal element except Ni, X and Y satisfy relation formulae of 0 < Y at most 0.10 and 0 < Y at most 0.30, (a) and (b) satisfy formulae of - 0.10 at most a at most 0.10 and - 0.15 at most b at most 0.15, wherein X is the total number of mols and in a case of A consisting of at least two kinds of alkali earth metal elements, X is the total number of mols of whole alkali earth metal elements, and Y is the total number of mols of B, and in a case of B consisting of at least two kinds of transient metal elements, Y is the total number of mols of all transient metal elements. In this method, a continuous burning furnace is used. An amount of drying air ten times per hour the volume of the heating part of the continuous burning furnace is supplied and discharged and heated at 400 - 900 deg. C for reaction.

ADVANTAGE - A positive electrode active material has high capacity and a good charge discharge cycle.

Dwg.0/0

Title Terms: ACTIVE; MATERIAL; BATTERY; MIXTURE; LITHIUM; COMPOUND; NICKEL; COMPOUND; ONE; KIND; TRANSIENT; METAL; COMPOUND; ALKALI; EARTH; METAL; COMPOUND; ACTIVE; MATERIAL

Derwent Class: L03; X16

International Patent Class (Main): H01M-004/58

International Patent Class (Additional): H01M-004/02; H01M-010/40

File Segment: CPI; EPI

Manual Codes (CPI/A-N): L03-E01B5

Manual Codes (EPI/S-X): X16-B01F1; X16-E01C; X16-E01G

AM